

# Chapter 45

## Using Personal Learning Environment (PLE) Management to Support Digital Lifelong Learning

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### ABSTRACT

*Personal Learning Environment is a promising pedagogical approach to integrate formal and informal learning in social media and support student self-regulated learning. The use of PLEs to support lifelong learning can be expanded to the formal, non-formal, or informal learning environments. This study empirically examined how PLE management predicted the use of PLE to support three types of lifelong learning (i.e., formal, non-formal, or informal learning). This study concluded that PLE management was predictive of each type of learning respectively. PLE is not only a technical platform but also a new digital learning literacy, conceptual space, pedagogical process, and social networks that enable and support learners to achieve their lifelong learning goals. While Open Educational Resources (OERs) are perceived as a solution for social justice in digital lifelong learning, PLE and Open Network Learning Environment are identified as the key pedagogy and instructional strategies to empower learners gaining network-learning literacy and becoming competent digital lifelong learners.*

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## **INTRODUCTION**

The prevalence of Open Educational Resources (OER), Web 2.0 tools, and Massive Open Online Courses (MOOCs), readily available lifelong learning is attracting the attention of people worldwide. The emerging practices of lifelong learning signals the need for more personal, social, and participatory approaches in learning, which support the active use and co-creation of learning resources to enrich learning processes and meet the personal needs of the learners (Leone, 2013). Regardless of its types (i.e., formal, non-formal, or informal learning), learning is always personal, collaborative, constructive, connective, and ubiquitous. Research reveals that Personal Learning Environments (PLEs) can be integrated into formal and informal learning (McLoughlin & Lee, 2010). PLE is a potentially promising pedagogical approach to integrate formal and informal learning in social media and to support student self-regulated learning (SRL) (Dabbagh & Kitsantas, 2012). As suggested by Ivanova and Chatti (2010), educators should foster organization of self-directed learning with open network environments where learners are allowed to select their own learning tools, services for the access of content and human intelligence inside and outside the educational institutions. Given that learning primarily occurs outside traditional formal situations (Leone, 2013), the use of PLE to support lifelong learning should be implemented not only in the formal education setting but also in the non-formal and informal environments (Greller & Drachsler, 2012). Therefore, it will be important to understand how PLE management can predict the actual use of PLE to support lifelong learning.

This study empirically examined the following research questions:

1. How will each of the three aspects of personal learning environment (PLE) management (i.e., level of initiative, sense of control, and level of self-reflection) respectively predict the use of PLE to support formal learning?
2. How will each of the three aspects of personal learning environment (PLE) management (i.e., level of initiative, sense of control, and level of self-reflection) respectively predict the use of PLE to support non-formal learning?
3. How will each of the three aspects of personal learning environment (PLE) management (i.e., level of initiative, sense of control, and level of self-reflection) respectively predict the use of PLE to support informal learning?

## **DIGITAL LIFELONG LEARNING**

Lifelong learning includes formal learning, non-formal learning, and informal learning (OECD, 2014) that are undertaken throughout life, resulting in an improvement in knowledge, skills and competences within a personal-, civic-, social- and/or employment-related perspective. Lifelong learning includes the provision of counseling and guidance services (Commission of the European Communities, 2001). Although formal learning is important in lifelong learning, non-formal and informal learning are estimated to constitute 70-90% of lifelong learning and is insufficiently represented in the literature of open and distance learning and development (Latchem, 2014). This is because most people's learning throughout their lifespans is informal, occurring in family, community, and work settings (Jeffs & Smith, 1997, 2005, 2011) and much of what they also learn is by means of non-formal education (Latchem, 2014).

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